A SUSTAINABLE BIOECONOMY

At its heart, the idea behind the bioeconomy is one of transition, a change from a culture of over consumption and resource depletion, to one where economic growth goes handin-hand with the rebuilding of natural resources on which an economy relies. Growing within ecological boundaries captures part of this ideal, yet it is all too easy to think that the bioeconomy can replace the fossil economy directly. It can't, at least not yet. The material consumption per capita in the EU is orders of magnitude larger than can be met through the use of biomass from conventional production systems and approaches alone. Many countries in the EU rely on imported food, either from neighbouring countries, or beyond. The development of the bioeconomy should therefore encourage sustainable and synergistic resource use, rather than adding to resource pressure.

"A new bio-based economy or bioeconomy can help to address the dilemma of meeting increasing demand for goods and services of a growing and more wealthy population, while at the same time halting the over-exploitation of resources and degradation of ecosystems and biodiversity and also mitigating climate change. [..] The transition to such a bioeconomy as part of an overall sustainability transition promotes green and inclusive growth, moving beyond low-productivity 'natural economies' and high-input fossil economies which have come to their limit".

Developing within existing resource availability means that the bioeconomy itself needs to be highly efficient, targeted at the delivery of priority products and services for society and feeding into an economy that is increasingly circular. The delivery of a wider circular economy (i.e. where overall consumption is reduced and based on principles of reuse and recycling) is a precondition of a successful and sustainable evolution of the bioeconomy. Traditionally bioeconomy activities have been seen very much from a production perspective, i.e. what can be produced from biomass to replace or complement non-renewable materials in the economy. The Bioeconomy Stakeholder Manifesto notes, "advancements in bioeconomy research and innovation uptake will allow Europe to improve the management of natural resources and to open new and diversified markets in food and biobased products. This will be important in order to cope with an increasing global population, rapid depletion of many resources, increasing

environmental pressures and climate change, as Europe needs to radically change its approach to production, consumption, processing, storage, recycling and disposal of biological resources." This approach has helped to realice new value from materials that would otherwise need to be disposed of (such as animal manure, food waste, and harvesting residues) and in many cases, improve resource efficiency. In turn, this has created new value chains in the rural economy, whilst supporting a greener society. Yet whilst the replacement of fossil and non-renewable materials and energy is essential in greening the European economy, it is only part of the picture of what could be a more sustainable and circular bioeconomy. The bioeconomy can, and one could argue should, include all the economic benefits that arise from the management and use of natural resources. Within that scope one can look beyond the production of biomass for materials, chemical and energy, and include the management and protection of natural habitats and landscapes, including the management of water flows and recycling of nutrients and organic matter back to soils, which help to protect and support societies and much, much more. These service-based bioeconomies already exist, and are part of the fabric of rural society, supported through Rural Development Programmes (RDPs). Yet they rarely feature in Member State bioeconomy strategies.

Fuente: UE Rural Review nº 28 (2019). A bioeconomy policy for rural areas: a sustainable bioeconomy.